

**CLAIMS**

1. Apparatus for the pyrolysis of material, which apparatus comprises a pyrolysis chamber, an inlet at a first end of the pyrolysis chamber, an outlet at a second end of the pyrolysis chamber, and feed means for feeding the material through the pyrolysis chamber, the feed means comprising a cranked member, at least one elongate member which extends along the pyrolysis chamber between the inlet and the outlet and which has a first end adjacent the inlet and a second end adjacent the outlet, a feed formation connected to the first end of the elongate member, and connector means which connects the second end of the elongate member to the cranked member, and the feed means being such that rotation of the cranked member causes the elongate member to move backwards and forwards and the feed formation to move the material from the inlet towards the outlet.
2. Apparatus according to any one of the preceding claims and including mounting means for hang mounting the first end of the elongate member in order to facilitate the movement backwards and forwards of the elongate member and the movement of the material by the feed formation.
3. Apparatus according to claim 2 in which the mounting means is a hanging bar or a hanging spring.

4. Apparatus according to any one of the preceding claims in which the feed formation is a rake head.
5. Apparatus according to any one of the preceding claims in which there are at least two of the elongate members, and at least two of the feed formations, there being one of the feed formations for each one of the elongate members.
6. Apparatus according to claim 5 in which there are three of the elongate members, and three of the feed formations.
7. Apparatus according to any one of the preceding claims and including drive means for driving the cranked member.
8. Apparatus according to claim 7 in which the drive means includes a motor.
9. Apparatus according to claim 8 in which the drive means includes a chain and sprocket arrangement.
10. Apparatus according to any one of the preceding claims in which the pyrolysis chamber is an outer shell which is made of a metal and which has a heat insulating lining.

11. Apparatus according to claim 10 in which the metal is steel.
12. Apparatus according to claim 10 or claim 11 in which a floor part of the pyrolysis chamber is formed by a floor of the outer shell and the heat insulating lining on the floor of the outer shell.
13. Apparatus according to claim 12 in which the heat insulating lining on the floor of the pyrolysis chamber is formed of fire bricks.
14. Apparatus according to any one of the preceding claims in which the pyrolysis chamber is constructed as a large long horizontally-extending chamber.